



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,922	09/30/1999	RANDALL BAIRD	2705-70	6051
20575	7590	06/12/2006	EXAMINER	
MARGER JOHNSON & MCCOLLOM, P.C. 210 SW MORRISON STREET, SUITE 400 PORTLAND, OR 97204			NGUYEN, TOAN D	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 06/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/409,922

Applicant(s)

BAIRD ET AL.

Examiner

Toan D. Nguyen

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-29, 31, 33-66, 68 and 70-74 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 9, 21-29, 33-37, 46, 64 and 70-74 is/are allowed.
6) ☒ Claim(s) 1-5, 7, 8, 10-16, 31, 38-42, 44, 45, 47-53, 57-63, 65, 66 and 68 is/are rejected.
7) ☒ Claim(s) 6, 17-19, 43 and 54-56 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 30 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 12-14, 31, 49-51 and 68 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 12, the limitation "multiplexing, at the primary media gateway controller, outbound signaling content destined for the packet-switched call signaling connections terminated by the signaling gateway, onto the smaller plurality of sessions with the signaling gateway". No support for this feature could be found in the original specification.

Regarding claim 31, the limitation "multiplexing means for assembling outbound signaling content - destined for the packet-switched call signaling connections terminated by the signaling gateway - onto a number of sessions smaller than a number of terminated call signaling connections for transmission to the signaling gateway." No support for this feature could be found in the original specification.

Regarding claim 49, the limitation "multiplexing, at the primary media gateway controller, outbound signaling content destined for the packet-switched call signaling

connections terminated by the signaling gateway, onto the smaller plurality of sessions with the signaling gateway". No support for this feature could be found in the original specification.

Regarding claim 68, the limitation "multiplexing means for assembling outbound signaling content - destined for the packet-switched call signaling connections terminated by the signaling gateway - onto a number of sessions smaller than a number of terminated call signaling connections for transmission to the signaling gateway." No support for this feature could be found in the original specification.

3. Claims 12-16 and 49-53 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "the native transport protocol" in line 18. There is insufficient antecedent basis for this limitation in the claim. Similar problems exist in claim 15 line 1, claim 16 line 1, claim 49 line 18, claim 52 line 1, and claim 53 line 1.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5, 10-11, 15 and 16 are rejected under 35 U.S.C. 103(a) as being obvious over Berg et al. (US 6,674,713) in view of Osman et al. (US 6,791,971).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

For claims 1, 3-5, 10 and 11, Berg et al. disclose method and apparatus for providing continuous voice and call communications between a data network and a telephony network, comprising the steps of:

terminating a plurality of call signaling connections (figure 1A, references 110 ISDN, 110 DPNSS, SS7), each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched (col. 6 lines 52-58); and

communicating, over a number of sessions smaller than the plurality of call signaling connections (figure 1A, references Session 1, Session 2), the signaling content of the call signaling connections from the signaling gateway to a primary media gateway controller (figure 1A, reference 102) (col. 6 lines 30-36).

However, Berg et al. do not expressly disclose routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the media gateway controller.

In an analogous art, Osman et al. disclose routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the media gateway controller (figure 12B, col. 13 lines 45-47 and col. 14 lines 5-8).

Osman et al. disclose further comprising the step of interpreting, at the primary media gateway controller, the signaling content (col. 14 lines 5-8 as set forth in claim 3); further comprising the step of issuing gateway control commands, from the media gateway controller to the media endpoint, based on the signaling content (col. 14 lines 5-8 as set forth in claim 4); wherein the media gateway controller similarly controls multiple media endpoints and similarly communicates with multiple signaling gateways (figure 12B, col. 13 lines 33 to col. 14 line 8 as set forth in claim 5); wherein the media endpoint is a media gateway (col. 14 lines 5-8 as set forth in claim 10); and wherein the signaling gateway and the media endpoint co-reside on the same platform (figure 12B, col. 13 lines 33-50 as set forth in claim 11).

One skilled in the art would have recognized the routing a plurality of packet-switched bearer streams, and would have applied Osman et al.'s exemplary signal flow in Berg et al.'s call processing system 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al.'s method and apparatus for providing a communications service, for communication and for extending packet network functionality in Berg et al.'s method and apparatus for providing continuous voice and call communications between a data network and a telephony network with the motivation being to send a CONNECT message to the destination GK (col. 14 lines 5-8).

For claim 2, Berg et al. disclose wherein the smaller number of sessions is one session (figure 1A, col. 6 lines 40-41).

For claim 15, Berg et al. disclose wherein the native transport protocol utilized for the call-signaling connections comprises TCP (col. 17 lines 32-33).

For claim 16, Berg et al. disclose wherein the native transport protocol utilized for the call-signaling connections comprises UDP (col. 17 line 62).

6. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over in Berg et al. (US 6,674,713) in view of Osman et al. (US 6,791,971) further in view of Dalrymple et al. (US 6,826,272).

For claims 7-8, Berg et al. in view of Osman et al. do not expressly disclose wherein the media endpoint is a media proxy. In an analogous art, Dalrymple et al. disclose wherein the media endpoint is a media proxy (figure 1, reference 105, col. 4 lines 22-24). Dalrymple et al. disclose further the step of forwarding one of the packet-

switched bearer streams from the media proxy to a media gateway also controlled by the media gateway controller (figure 2, references 211, col. 7 lines 17-24 as set forth in claim 8).

One skilled in the art would have recognized the media endpoint is a media proxy, and would have applied Dalrymple et al.'s routing a PSTN call to an H.323 handset in Berg et al.'s call processing system 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Dalrymple et al.'s method and apparatus for integrated multimedia call control in Berg et al.'s method and apparatus for providing continuous voice and call communications between a data network and a telephony network with the motivation being to perform a routing from an incoming network PSTN call, through the gateway to the user's H.323 handset (col. 6 lines 25-27).

7. Claims 38-42, 47-48 and 52-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US 6,674,713) in view of Osman et al. (US 6,791,971) further in view of Auerbach et al. (Signaling Backhaul Protocol, 25 February 1999, IETF Internet Draft).

For claim 38, Berg et al. disclose method and apparatus for providing continuous voice and call communications between a data network and a telephony network, comprising the steps of:

terminating a plurality of call signaling connections (figure 1A, references 110 ISDN, 110 DPNSS, SS7), each corresponding to one of a plurality of packet-switched

calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched (col. 6 lines 52-58); and

communicating, over a number of sessions smaller than the plurality of call signaling connections (figure 1A, references Session 1, Session 2), the signaling content of the call signaling connections from the signaling gateway to a primary media gateway controller (figure 1A, reference 102) (col. 6 lines 30-36).

However, Berg et al. do not expressly disclose routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the primary media gateway controller.

In an analogous art, Osman et al. disclose routing a plurality of packet-switched bearer streams, each corresponding to one of the packet-switched calls, to a media endpoint controlled by the primary media gateway controller (figure 12B, col. 13 lines 45-47 and col. 14 lines 5-8).

Osman et al. disclose further comprising the step of interpreting, at the primary media gateway controller, the signaling content (col. 14 lines 5-8 as set forth in claim 40); the step of issuing gateway control commands, from the media gateway controller to the media endpoint, based on the signaling content (col. 14 lines 5-8 as set forth in claim 41); and wherein the primary media gateway controller similarly controls multiple media endpoints and similarly communicates with multiple signaling gateways (figure 12B, col. 13 lines 33 to col. 14 line 8 as set forth in claim 42); wherein the media endpoint is a media gateway (col. 14 lines 5-8 as set forth in claim 47); and wherein the

signaling gateway and the media endpoint co-reside on the same platform (figure 12B, col. 13 lines 33-50 as set forth in claim 48).

One skilled in the art would have recognized the routing a plurality of packet-switched bearer streams, and would have applied Osman et al.'s exemplary signal flow in Berg et al.'s call processing system 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Osman et al.'s method and apparatus for providing a communications service, for communication and for extending packet network functionality in Berg et al.'s method and apparatus for providing continuous voice and call communications between a data network and a telephony network with the motivation being to send a CONNECT message to the destination GK (col. 14 lines 5-8).

Furthermore, Berg et al. do not expressly disclose wherein an H.323 backhaul channel is used when communicating the signal content of the call signaling connections from the signaling gateway to the primary media gateway controller. In an analogous art, Auerbach et al. disclose wherein an H.323 backhaul channel is used when communicating the signal content of the call signaling connections from the signaling gateway to the primary media gateway controller (page 3, section 1.1 lines 3-9).

One skilled in the art would have recognized the H.323 backhaul channel, and would have applied Auerbach et al.'s backhaul in Berg et al.'s call processing system 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Auerbach et al.'s signal backhaul protocol in Berg et al.'s method

and apparatus for providing continuous voice and call communications between a data network and a telephony network with the motivation being to provide a delivery mechanism (page 3, section 2.1 line 2).

For claim 39, Berg et al. disclose wherein the smaller number of sessions is one session (figure 1A, col. 6 lines 40-41).

For claim 52, Berg et al. disclose wherein the native transport protocol utilized for the call-signaling connections comprises TCP (col. 17 lines 32-33).

For claim 53, Berg et al. disclose wherein the native transport protocol utilized for the call-signaling connections comprises UDP (col. 17 line 62).

8. Claims 44-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over in Berg et al. (US 6,674,713) in view of Osman et al. (US 6,791,971) and Auerbach et al. (Signaling Backhaul Protocol, 25 February 1999, IETF Internet Draft) further in view of Dalrymple et al. (US 6,826,272).

For claims 44 and 45, Berg et al. in view of Osman et al. and Auerbach et al. do not expressly disclose wherein the media endpoint is a media proxy. In an analogous art, Dalrymple et al. disclose wherein the media endpoint is a media proxy (figure 1, reference 105, col. 4 lines 22-24).

Dalrymple et al. disclose further the step of forwarding one of the packet-switched bearer streams from the media proxy to a media gateway also controlled by the media gateway controller (figure 2, references 211, col. 7 lines 17-24 as set forth in claim 45).

One skilled in the art would have recognized the media endpoint is a media proxy, and would have applied Dalrymple et al.'s routing a PSTN call to an H.323 handset in Berg et al.'s call processing system 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Dalrymple et al.'s method and apparatus for integrated multimedia call control in Berg et al.'s method and apparatus for providing continuous voice and call communications between a data network and a telephony network with the motivation being to perform a routing from an incoming network PSTN call, through the gateway to the user's H.323 handset (col. 6 lines 25-27).

9. Claims 57-63 and 65-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berg et al. (US 6,674,713) in view of Auerbach et al. (Signaling Backhaul Protocol, 25 February 1999, IETF Internet Draft).

For claims 57 and 58, Berg et al. disclose method and apparatus for providing continuous voice and call communications between a data network and a telephony network, comprising the steps of:

means for terminating a plurality of call signaling connections (figure 1A, references 110 ISDN, 110 DPNSS, SS7), each corresponding to one of a plurality of packet-switched calls, at a packet-switched signaling gateway, where each call signaling connection is packet-switched (col. 6 lines 52-58); and

means for multiplexing signaling content received over the plurality of call signaling connections onto a smaller number of packet-switched sessions (figure 1A, references Session 1, Session 2)(col. 6 lines 52-58).

However, Berg et al. do not expressly disclose transmission over an H.323 backhaul channel to a media gateway controller. In an analogous art, Auerbach et al. disclose transmission over an H.323 backhaul channel to a media gateway controller (page 3, section 1.1 lines 3-9).

Auerbach et al. disclose wherein the packet-switched call signaling connections include H.225 Q.931 connections, H.225 RAS connections, and H.245 connections (page 11, section 3.1 ISDN, line 6 as set forth in claim 58).

One skilled in the art would have recognized the H.323 backhaul channel, and would have applied Auerbach et al.'s backhaul in Berg et al.'s call processing system 100. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, to use Auerbach et al.'s signal backhaul protocol in Berg et al.'s method and apparatus for providing continuous voice and call communications between a data network and a telephony network with the motivation being to provide a delivery mechanism (page 3, section 2.1 line 2).

For claim 59, Berg et al. disclose wherein the smaller number is one (figure 1A, col. 6 lines 40-41).

For claim 60, Berg et al. disclose wherein the transport protocol used by the terminating means for the plurality of packet-switched call signaling connections comprises TCP (col. 17 lines 32-33).

For claim 61, Berg et al. disclose wherein the transport protocol used by the multiplexing means for the single session is selected from the group of protocol consisting of TCP, SCTP, and RUDP (col. 17 lines 9-10).

For claim 62, Berg et al. disclose wherein the transport protocol used by the terminating means for each of the plurality of packet-switched call signaling connections is selected from the group of protocol consisting of TCP, SCTP, and RUDP (col. 17 lines 9-10).

For claim 63, Berg et al. disclose wherein the transport protocol used by the multiplexing means for the single session is selected from the group of protocol consisting of TCP and RUDP (col. 17 lines 9-10 and col. 17 lines 32-33).

For claim 65, Berg et al. disclose means for terminating a packet-switched bearer stream associated with one of the packet-switched call signaling connections (figure 1A, reference 104, col. 6 lines 52-58).

For claim 66, Berg et al. disclose means for receiving gateway control signaling from a media gateway controller; and control means responsive to received gateway control signaling (col. 6 lines 31-32).

Allowable Subject Matter

10. Claims 6, 17-19, 43 and 54-56 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 9, 21-29, 33-37, 46, 64 and 70-74 are allowed.

Regarding claim 9, the prior art fails to teach a combination of the steps of: prior to the forwarding step, modifying the format of the forwarded packet-switched bearer stream within the media proxy, in the specific combination as recited in the claim.

Regarding claim 27, the prior art fails to teach a combination of the steps of:

means for parsing the multiplexed signaling content into multiple protocol data units and transmitting each protocol data unit over its appropriate packet-switched call signaling connection, in the specific combination as recited in the claim.

Regarding claim 37, the prior art fails to teach a combination of the steps of:
a plurality of media endpoints, which comprises both media gateways and media proxies, with each endpoint capable of terminating a plurality of packet switched bearer streams, in the specific combination as recited in the claim.

Regarding claim 46, the prior art fails to teach a combination of the steps of:
prior to the forwarding step, modifying the format of the forwarded packet-switched bearer stream within the media proxy, in the specific combination as recited in the claim.

Regarding claim 64, the prior art fails to teach a combination of the steps of:
means for parsing the multiplexed signaling content into multiple protocol data units and transmitting each protocol data unit over its appropriate packet-switched call signaling connection, in the specific combination as recited in the claim.

Regarding claim 74, the prior art fails to teach a combination of the steps of:
a set of one or more primary media gateway controllers, the set of primary media gateway controllers in communication with each of the signaling gateways through H.323 backhaul channels and each of the media endpoints, the primary media gateway controllers using multiplexed signaling content received from the plurality of signaling gateway to control operation of the media endpoints, in the specific combination as recited in the claim.

Response to Arguments

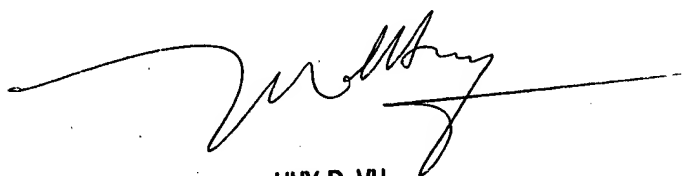
12. Applicant's arguments with respect to claims 1-19, 21-29, 31-66, 68, and 70-74 have been considered but are moot in view of the new ground(s) of rejection.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan D. Nguyen whose telephone number is 571-272-3153. The examiner can normally be reached on M-F (7:00AM-4:30PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Huy Vu can be reached on 571-272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TN
TN



HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600